UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,192	08/10/2001	Shell Sterling Simpson	10007680-1	6999

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EXAMINER
NANO, SARGON N

ART UNIT	PAPER NUMBER
2157	

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Office Action Summary	09/928,192	SIMPSON, SHELL STERLING	
	Examiner	Art Unit	
	Sargon N Nano	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>10 August 2001</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-28</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-28</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>10 AUG. 01</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to the application filed on Aug. 10, 2001.Claims 1 – 28

are pending examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 5 recites the limitation "its proximity" in line 3. There is insufficient

antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3 - 7, 9 - 20, 22 - 28 are rejected under 35 U.S.C. 102(e) as being

anticipated by Blumenau et al U.S Patent No. 6,665,714.

As to claim 1, a system comprising: a device proximity detector to determine, for

each of one or more devices in a network, an inferred proximity of the device to the

system based at least in part on which port of a network switch the system is coupled to

and which port of the network switch the device is coupled to (see col.6, line 43 – col.7,

line12 Blumenau discloses the identification of devices in a network and the ports of

particular devices coupled to a network) ; and

a network interface, coupled to the device proximity detector, to allow the device

proximity detector to communicate with the one or more network switches see col. 7

lines 13 – 34 Blumenau discloses the interface of devices in the network may require

little redesign) .

As to claim 3, a system as recited in claim 1, wherein the device proximity

detector includes a switch identification module to detect each of the network switches

in the network (see col.7 lines 1 – 5 Blumenau discloses the source identifier identifies

the device).

As to claim 4, a system as recited in claim 1, wherein the device proximity

detector includes a device identification module to detect, from the network switch,

which port of the network switch each of the one or more devices is coupled to (see

col.7 lines 1 – 12, Blumenau discloses the port of a particular device coupled to a

network).

As to claim 5, a system as recited in claim 1, wherein the device proximity

detector includes a proximity ranking module to rank each of the one or more devices in terms of its proximity to the system (see col. 29, lines 56 – 67, Blumenau discloses multiple selected system are selected).

As to claim 6, a system as recited in claim 1, wherein the device proximity detector is to identify the inferred proximity of the device to the system by:

determining, if the device shares the same port on the switch as the system and with a smallest number of other devices also sharing the same port, that the device is one of the closest devices to the system(see col. 28 lines 35 – 65);

otherwise, if the device shares the same port on the switch as the system and with a smaller number of other devices also sharing the same port, then determining that the device is a second closest device to the system (see col. 28 lines 35 – 65);

otherwise, if the device shares the same port on the switch as the system and without regard for a number of other devices also sharing the same port, then determining that the device is a third closest device to the system(see col. 28 lines 35 – 65); and

otherwise, if the device shares the switch with any number of other devices also sharing the switch, then determining that the device is a fourth closest device to the system, and otherwise determining that the device is a fifth closest device to the system (see col. 28 lines 35 – 65) .

As to claim 7, one or more computer readable media having stored thereon a plurality of instructions that, when executed by one or more processors, causes the one or more processors to perform acts comprising:

identifying one or more devices in a network (see col.6, line 43 – col.7, line12 Blumenau discloses the identification of devices in a network and the ports of particular devices coupled to a network);

obtaining, for at least one of one or more network switches in the network, an indication of which port of the network switch a computing device is coupled to(see col.7 lines 1 – 12, Blumenau discloses the port of a particular device coupled to a network);

obtaining, for each of the one or more identified devices and for the at least one network switch, an indication of which port of the network switch the identified device is coupled to (see col. 6 lines 4 – 13 and col.6 lines 43 – col7, line 12 Blumenau discloses the identification of the device and what port is used) ; and

determining, for at least one of the one or more identified devices, how close the identified device is to the computing device, wherein the determining is based at least in part on the indication of which port of the network switch the computing device is coupled to and the indication of which ports of the network switch the one or more identified devices are coupled to (see col. 28 lines 35 – 65, and fig.14, Blumenau discloses different ways of storage systems).

As to claim 9, one or more computer readable media as recited in claim 7, wherein obtaining an indication of which port of the network switch a computing device is coupled to comprises obtaining the indication from the network switch (see col.7 lines 1 – 5 Blumenau discloses the source identifier identifies the device).

As to claim10, one or more computer readable media as recited in claim 7,

wherein obtaining an indication of which port of the network switch the identified device

is coupled to comprises obtaining the indication from the network switch (see col.7 lines

1 – 12, Blumenau discloses the port of a particular device coupled to a network).

As to claim 11, one or more computer readable media as recited in claim 7,

wherein the determining comprises generating, for at least one of the one or more

identified devices, a ranking indicating a proximity of the identified device to the

computing device relative to the other identified devices see col. 29, lines 56 – 67,

Blumenau discloses multiple selected system are selected).

As to claim 12, one or more computer readable media as recited in claim 11,

wherein the plurality of instructions further cause to one or more processors to perform

an additional act comprising: presenting, to a user, each of the generated rankings(see

figs. 17 – 20).

As to claim13, one or more computer readable media as recited in claim 7,

wherein the computing device comprises both the computer readable media and the

one or more processors (see col. 7, lines 15 – 35, Blumenau discloses the use of a host

processor device to communicate with storage system) .

As to claim 14, one or more computer readable media as recited in claim 7,

wherein the computing device comprises both the one or more processors and an I/O

device to read the one or more computer readable media (see col. 7, lines 15 – 35,

Blumenau discloses the use of a host processor device to communicate with storage

system).

AS to claim15, one or more computer readable media as recited in claim 7,

wherein determining how close the identified device is to the computing device

comprises:

checking whether the identified device shares the same port on the switch as the

computing device and with a smallest number of other devices also sharing the same

port (see col.7 lines 1 – 12, (see col.7 lines 1 – 12, Blumenau discloses the port of a

particular device is coupled to a network); and ;

determining, if the identified device shares the same port on the switch as the

computing device and with the smallest number of other devices also sharing the same

port, that the identified device is one of the closest devices to the computing device (

see col.28, lines 35 – 65, Blumenau discloses the sharing of a port by devices).

As to claim 16, one or more computer readable media as recited in claim 15,

wherein determining how close the identified device is to the computing device further

comprises:

checking whether the identified device shares the same port on the switch as the

computing device and with a smaller number of other devices also sharing the same

port (see col.28, lines 35 – 65, Blumenau discloses the sharing of a port by devices);

and

determining, if the identified device shares the same port on the switch as the

computing device and with the smaller number of other devices also sharing the same

port, that the identified device is a second closest device to the computing device. (see

col.28, lines 35 – 65, Blumenau discloses the sharing of a port by devices and col.28

lines 35 – 65).

As to claim 17 one or more computer readable media as recited in claim 16, wherein determining how close the identified device is to the computing device further comprises:

checking whether the identified device shares the same port on the switch as the computing device without regard for a number of other devices also sharing the same port (see col.28, lines 35 – 65, Blumenau discloses the sharing of a port by devices and col.28 lines 35 – 65).; and

determining, if the identified device shares the same port on the switch as the computing device without regard for the number of other devices also sharing the same port, that the identified device is a third closest device to the computing device (see col.28, lines 35 – 65, Blumenau discloses the sharing of a port by devices and col.28 lines 35 – 65).

As to claim 18, one or more computer readable media as recited in claim 17, wherein determining how close the identified device is to the computing device further comprises:

checking whether the identified device shares the switch with any number of other devices also sharing the switch(see col.28, lines 35 – 65, Blumenau discloses the sharing of a port by devices and col.28 lines 35 – 65);

determining, if the identified device shares the switch with any number of other devices also sharing the switch, that the identified device is a fourth closest device to the computing device(see col. 28 lines 35 – 65); and

determining, if the identified device does not share the switch with any number of other devices also sharing the switch, that the identified device is a fifth closest device to the computing device (see col. 28 lines 35 – 65).

As to claim19, one or more computer readable media as recited in claim 7, wherein determining how close the identified device is to the computing device comprises:

if the identified device shares the same port on the switch as the computing device and with a smallest number of other devices also sharing the same port, then determining the identified device is one of the closest devices to the computing device(see col.28, lines 35 – 65, Blumenau discloses the sharing of a port by devices);

otherwise, if the identified device shares the same port on the switch as the computing device and with a smaller number of other devices also sharing the same port, then determining the identified device is a second closest device to the computing device(see col.28, lines 35 – 65, Blumenau discloses the sharing of a port by devices and col. 28 lines 35 and 65);

otherwise, if the identified device shares the same port on the switch as the computing device and without regard for a number of other devices also sharing the same port, then determining the identified device is a third closest device to the computing device(see col.28, lines 35 – 65, Blumenau discloses the sharing of a port by devices and col. 28 lines 35 and 65);

; and

otherwise, if the identified device shares the switch with any number of other devices also sharing the switch, then determining the identified device is a fourth closest device to the computing device, and otherwise determining the identified device is a fifth closest device to the computing device (see col.28, lines 35 – 65, Blumenau discloses the sharing of a port by devices and col. 28 lines 35 and 65).

As to claim 20, a method, implemented in a computing device that is part of a network, the method comprising:

detecting one or more network switches in the network (see col.6, line 43 – col.7, line12 Blumenau discloses the identification of devices in a network)

identifying one or more other devices of a particular type in the network (see col.6, line 43 – col.7, line12 Blumenau discloses the identification of devices in a network).

obtaining, for each of the identified one or more other devices and for at least one of the one or more network switches, an indication of which port of the network switch the device is coupled to, wherein the indication is obtained from at least one of the one or more network switches(see col.6, line 43 – col.7, line12 Blumenau discloses the identification of devices in a network and what port is used; and

ranking, based at least in part on the obtained indications as well as which port of the network switch the computing device is coupled to, the one or more other devices in terms of their inferred proximity to the computing device(see col. 29, lines 56 – 67, Blumenau discloses multiple selected systems are selected) .

As to claim 22, a method as recited in claim 20, wherein identifying one or more

other devices of a particular type in the network comprises identifying the one or more

other devices in the network by accessing a list of device identifiers (see col.6, line 43 –

col.7, line12 Blumenau discloses the identification of devices in a network).

As to claim 23, a method as recited in claim 20, wherein identifying one or more

other devices of a particular type in the network comprises identifying the one or more

other devices in the network by querying a plurality of devices on the network to

determine, for each of the plurality of devices, whether the device is of the particular

type (see col.7 lines 1 – 5 Blumenau discloses the source identifier identifies the

device).

As to claim 24, a method as recited in claim 20, further comprising presenting, to

a user, the ranking of at least one of the one or more other devices (see col. 28 lines 35

– 65).

As to claim 25, a method as recited in claim 20, wherein ranking a device of the

one or more other devices comprises:

checking whether the device shares the same port on a network switch as the

computing device and with a smallest number of additional devices also sharing the

same port (see col. 28 lines 35 – 65) ; and

determining, if the device shares the same port on the network switch as the

computing device and with the smallest number of additional devices also sharing the

same port, that the device is one of the closest devices to the computing device (see

col. 28 lines 35 – 65).

As to claim 26, a method as recited in claim 25, wherein ranking the device of the one or more other devices further comprises:

checking whether the device shares the same port on the network switch as the computing device and with a smaller number of the additional devices also sharing the same port (see col. 28 lines 35 – 65). ;

determining, if the device shares the same port on the switch as the computing device and with the smaller number of the additional devices also sharing the same port, that the device is a second closest device to the computing device (see col. 28 lines 35 – 65) .

AS to claim 27, a method as recited in claim 26, wherein ranking the device of the one or more other devices further comprises:

checking whether the device shares the same port on the switch as the computing device without regard for a number of additional devices also sharing the same port (see col. 28 lines 35 – 65 and fig.17);

determining, if the device shares the same port on the switch as the computing device without regard for the number of additional devices also sharing the same port, that the device is a third closest device to the computing device. (see col. 28 lines 35 – 65 and fig. 22) .

As to claim 28, a method as recited in claim 27, wherein ranking the device of the one or more other devices further comprises:

checking whether the device shares the switch with any number of additional devices also sharing the switch(see col. 28 lines 35 – 65 and fig. 22);

determining, if the device shares the switch with any number of additional

devices also sharing the switch, that the device is a fourth closest device to the

computing device (see col. 28 lines 35 – 65 and fig. 1c); and

determining, if the device does not share the switch with any number of

additional devices also sharing the switch, that the device is a fifth closest device to the

computing device (see col. 28 lines 35 – 65 and fig. 1c).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claim 2, 8 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Blumenau et al U.S. Patent No.6,665,714 and further in view of official notice.

Blumenau teaches a system, a method, and a computer readable media

comprising: a device proximity detector to determine, for each of one or more devices in

a network, an inferred proximity of the device to the system based at least in part on

which port of a network switch the system is coupled to and which port of the network

switch the device is coupled to (see col.6, line 43 – col.7, line12 Blumenau discloses the

identification of devices in a network and the ports of particular devices coupled to a

network) ; and

a network interface, coupled to the device proximity detector, to allow the device

proximity detector to communicate with the one or more network switches see col. 7

lines 13 – 34 Blumenau discloses the interface of devices in the network may require

little redesign) .

Blumenau does not teach the limitation "wherein at least one of the one or more devices

comprises a printer". Official notice is taken that one of the ordinary skill in the art at the

time of the invention would include a printer because by doing so would allow the user

to automatically configure different types of devices on private network using GUI.

Conclusion

4.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Sargon N Nano whose telephone number is (571) 272-

4007. The examiner can normally be reached on 8 hour.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

Sargon Nano
Patent Examiner
Art Unit 2157
Nov. 5, 04

SALEH NAJJAR
PRIMARY EXAMINER